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09/811,564	03/20/2001	Alex Elkin	WEB0001-US	9241

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EXAMINER

ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
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3639

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,564

Applicant(s)

ELKIN ET AL.

Examiner

Akiba K Robinson-Boyce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>072301,091801</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Status of Claims***

1. Due to communications filed 3/20/01, the following is a non-final first office action. Claims 1-33 are pending in this application and have been examined on the merits. Claims 1-33 are rejected as follows.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "the process model" in claim 1 is a relative term that renders the claim indefinite. The terms "the process model" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Because the term "the process model" is used, the entire claim and the scope of the invention unclear.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of :

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

6. For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful art" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claim 1 is directed to a method for defining and implementing business processes. Claim 1 recites the steps of "adding components to a process definition...", "defining interface elements...", "defining control flow...", and "submitting the process model to a process server...". These steps produce a useful, concrete, and tangible result, however represent mere ideas in the abstract since they do not describe computer means or software embodied on a tangible medium to help process the steps of these claims. Since no computer means or software embodied on a tangible medium exist, claim 1, and all claims that depend from it (Claims 2-6) are therefore found to be non-statutory.

In the present case, claim 7 is directed to a method of generating an enterprise application. Claim 7 recites the steps of "identifying a plurality of building blocks...", "sequencing and connecting together the plurality of building blocks...", "defining at least one task...", "associating data with the at least one task...", "loading the workflow process model...", and "generating on the process server a client application...". These steps produce a useful, concrete, and tangible result, however represent mere ideas in the abstract since they do not describe computer means or software embodied on a tangible medium to help process the steps of these claims. Since no computer means or software embodied on a tangible medium exist, claim 7, and all claims that depend from it (Claims 8-14) are therefore found to be non-statutory.

In the present case, claim 15 is directed to a method of defining and implementing a top-down workflow process. Claim 15 recites the steps of "identifying top level process steps...", "selecting graphically displayed building blocks...", "arranging and connecting the building blocks...", "determining which of the top level process steps in the top level workflow...", "for each top level process step identified in step (d), selecting further building blocks...", "associating non-control data with at least a portion of the building blocks", "loading the building blocks...", and "running the top level workflow process model...". These steps produce a useful, concrete, and tangible result, however represent mere ideas in the abstract since they do not describe computer means or software embodied on a tangible medium to help process the steps of these claims. Since no computer means or software embodied on a tangible medium

exist, claim 15, and all claims that depend from it (Claims 16-25) are therefore found to be non-statutory.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Flores et al, (US 5,734,837).

As per claim 26, Flores discloses:

(a) a process designer tool having a graphical interface for defining a business process model in a top-down method, (col. 5, lines 39-52, programming interface, w/ col. 7, lines 49-55, shows graphical user interface is implemented, w/ col. 32, lines 32-35 shows a process where passing to top level occurs);

the business process model having

(i) at least one process having control flow defined between at least two components, (Fig. 2a, shows workflow model with links, w/ col. 8, lines 26-30, shows link definitions);  
and

(ii) at least one task having a definition, each task definition incorporating a user interface for performing the task and defining access to business data required to

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complete the task, (Col. 33, lines 49-58, task calls forms and views generation module for the user interface); and

(b) a process server capable of deploying the process model by following the control flow defined in the process and presenting to at least one end user the defined task via the user interface, (Col. 4, line 48-col. 5, line 14, workflow server).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guheen et al (US 6,615,166), and further in view of Flores et al (US 5,734,837).

As per claim 1 Guheen et al discloses:

a) adding components to a process definition, including at least one task requiring user interaction, (col. 40, lines 20-62, shows process definition consist of standards involving components);

b) defining interface elements for the task, (col. 61, lines 36-47, design of user interfaces);

c) defining control flow between the components of the process definition, (col. 101, lines 9-13, control flow);

and submission of the at least one task for end users via the defined interface elements, (Col. 273, lines 35-67, integrating WAF functionality into commercial and user applications, where the end-user implements the WAF application which is shown to have a plurality of templates for different tasks).

Guheen et al does not specifically disclose a process server, but does disclose a network example where an application is provided to proxy services and spreads tasks among servers in Col. 252, lines 23-31.

However, Flores et al discloses:

(d) submitting the process model to a process server for execution of the control flow, (Col. 4, line 48-col. 5, line 14, workflow server). Flores et al discloses this limitation in an analogous art for the purpose of showing the computer means used to execute workflow commands.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to submit the process model to a process server for execution of the control flow with the motivation of implementing the workflow in an application.

As per claim 2, Guheen et al discloses:

e) defining data flow between components of the process definition, (Col. 101, lines 35-40, data flow diagramming).

As per claim 3, Guheen et al discloses:

wherein at least some of the components have events which can be either an action or a result, and further wherein control flow is defined at least in part by linking a result of one component to an action of a second component, (col. 101, lines 9-20, dataflow has one output and can be shared with other systems, w/ col. 116, lines 18-25, dataflow diagrams show links).

As per claim 4, Guheen et al discloses:

wherein certain components are contained within other components, (Col.14, lines 18-20, subcomponents).

As per claim 5, Guheen et al discloses:

wherein the components have attributes, (Col. 14, lines 20-30, indicia coding to represent services or that component, w/ col. 98, lines 17-29, data model attributes).

As per claim 6, Guheen et al discloses:

wherein the process of defining data flow comprises the associating of the attributes of a component containing another component with the attributes of the contained component, (Col. 101, lines 15-20, each attribute must have one input flow associated with it).

As per claim 7, Guheen et al discloses:

(a) identifying a plurality of building blocks that define a workflow process, each building block being representative of a step in the workflow process, (Col. 40, lines 21-25, define processes for data how to perform and produce at each step);

(b) sequencing and connecting together the plurality of building blocks to create a workflow process model, (Col. 110, lines 1-7, workflow/sequence diagrams);

(c) defining at least one task to be accomplished within at least one of the building blocks, (col. 40, line 55, defining procedures that specify how to perform a task);

(d) associating data with the at least one task, (Col. 41, lines 31-38, referring standards, procedures, etc. to a set of tasks);

(f) generating on the process server a client application accessible to users, (Col. 273, lines 35-67, integrating WAF functionality into commercial and user applications, where the end-user implements the WAF application which is shown to have a plurality of templates for different tasks).

Guheen et al does not specifically disclose a process server, but does disclose a network example where an application is provided to proxy services and spreads tasks among servers in Col. 252, lines 23-31.

However, Flores et al discloses:

(e) loading the workflow process model on a process server, (Col. 4, line 48-col. 5, line 14, workflow server). Flores et al discloses this limitation in an analogous art for the purpose of showing the computer means used to execute workflow commands.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to load the workflow process model on a process server with the motivation of implementing the workflow in an application.

As per claim 8, Guheen et al discloses:

wherein each building block is comprised of at least one of a component and resource, (Col. 14, lines 18-21, various components).

As per claim 9, Guheen et al discloses:

wherein the component is comprised of at least one of a container and an element, (Col. 28, lines 57-59, elements).

As per claim 10, Guheen et al discloses:

wherein the container is comprised of at least one of a process, a task, a router and a controller, Col. 41, lines 31-38, referring standards, procedures, etc. to a set of tasks).

As per claim 11, Guheen et al discloses:

wherein the element is comprised of at least one of a view, a join, a comparator, a timer, an assigner, a notifier, an action-launcher, an adapter and a locker, (col. 28, lines 57-59, windows represents the action-launcher).

As per claim 12, Guheen et al discloses:

wherein the resource is comprised of at least one of a business entity a role, a user, a calendar, a decision criteria and a data controller, (Col. Col. 6, lines 60-64, customer represents user).

As per claim 13, Guheen et al discloses:

wherein step (b) comprises graphically displaying the building blocks, (Col. 117, lines 48-54, graphical representation tools).

As per claim 14, Guheen et al discloses:

wherein the task comprises a unit of work performed by a computer program, (Col. 27, lines 53-58, computer program).

11. Claims 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flores et al (US 5,734,837), and further in view of Johnson (US 5,721,943).

As per claim 15, Flores discloses:

(a) identifying top level process steps in the workflow process, (col. 32, lines 32-35, passes to top level, therefore inherent to first identify top level);

(b) selecting graphically displayed building blocks to represent each of the top level process steps, (col. 7, lines 49-55, graphical user interface w/col. 8, lines 31-36, workflows are graphically represented as loops);

(c) arranging and connecting the building blocks to create a top level workflow process model, (Fig. 2a);

(d) determining which of the top level process steps in the top level workflow process model are amenable to sub-process steps, (Col. 22, lines 6-10, subprocess);

(e) for each top level process step identified in step (d), selecting further building blocks to represent the sub-process steps and associating the thus-selected building blocks with the respective top level process step identified in step (d), (Col 22, lines 19-28, subprocess begins with a link and goes to workflow, etc.);

Flores fails to disclose Flores fails to disclose (f) associating non-control data with at least a portion of the building blocks, but does disclose building blocks through a workflow model in Fig. 2a).

However, Johnson discloses:

(f) associating non-control data with at least a portion of the building blocks, (Fig. 9b, client shows lock information associated with non-controlled data). Johnson

discloses this limitation in an analogous art for the purpose of showing that non-controlled data can be incorporated into a workflow process.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to associate non-control data with at least a portion of the building blocks with the motivation of incorporating non-control data into a workflow.

Flores fails to disclose (g) loading the building blocks and at least a portion of the non-control data on a process server, but does disclose building blocks through a workflow model in Fig. 2a).

However, Johnson discloses:

(g) loading the building blocks and at least a portion of the non-control data on a process server, (Col. 32, lines 32-35, passes to top level). Johnson discloses this limitation in an analogous art for the purpose of showing that non-control data can be implemented in a workflow and executed.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to load the building blocks and at least a portion of the non-control data on a process server with the motivation of executing non-control data.

As per claim 16, Flores discloses:

wherein each building block is comprised of at least one of a component and resource, (col. 82, lines 23-25, component representation).

As per claim 17, Flores discloses:

wherein the component is comprised of at least one of a container and an element, (Col. 24, lines 58-60, elements).

As per claim 18, Flores discloses:

wherein the container is comprised of at least one of a process, a task, a router and a controller, (Col. 82, line 16, business process).

As per claim 19, Flores discloses:

wherein the element is comprised of at least one of a view, a join, a comparator, a timer, an assigner, a notifier, an action-launcher, an adapter and a locker, (col. 5, lines 30-33, views).

As per claim 20, Flores discloses:

wherein the resource is comprised of at least one of a business entity, a role, a user, a calendar, a decision criteria and a data controller, (Col. 3, lines 16-17, roles).

As per claim 21, Flores discloses:

wherein the building blocks are graphically wired together, (Abstract, lines 7-9, graphical tools).

As per claim 22, Flores discloses:

wherein step (f) comprises mapping data, (Abstract, lines 7-9, map out business process).

As per claim 23, Flores discloses:

further comprising modifying sub-process steps within a connected building block, (Fig. 2a).

As per claim 24, Flores discloses:

further comprising making the building blocks available to users via a process design server, (Abstract, lines 1-6, unified tool, w/ col. 5, lines 39-52, program initiated to access services of the workflow server).

As per claim 25, Flores discloses:

further comprising requesting a person having particular knowledge about one or more of the sub-processes to assist in selecting and arranging building blocks representative thereof, (col. 6, lines 7-9, particular STF processor developer).

12. Claims 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flores et al (US 5,734,837), and further in view of Guheen et al (US 6,615,166).

As per claim 27, Flores discloses:

a process designer comprising a graphical user interface used to develop components and resources and to define process flow and data flow among said components and resources, the process designer being capable of defining at least one procedure associated with at least one of said components and resources, (col. 5, lines 39-52, programming interface, w/ col. 7, lines 49-55, shows graphical user interface is implemented);

a process server for running the at least one procedure, (Col. 4, line 48-col. 5, line 14, workflow server); and

a process client comprising a graphical user interface operable to allow end users to log on and connect to the process server, to access any assigned tasks and to perform said assigned tasks, col. 5, lines 39-52, workflow APIs that provide a

programming interface, w/ col. 7, lines 49-55, shows graphical user interface is implemented).

Flores et al does not disclose assigning tasks in accordance with a priority scheme defined in the process designer, but does disclose the generation of business process definitions by a process designer in the abstract, lines 6.

However, Guheen et al discloses:

assigning tasks in accordance with a priority scheme defined in the process designer, (Col. 292, lines 47-50, prioritizing components according to defined indicia coding). Guheen et al discloses this limitation in an analogous art for the purpose of prioritizing components required for the implementation of a predetermined technology.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to assign tasks in accordance with a priority scheme defined in the process designer with the motivation of implementing the components of a workflow in a specific order.

As per claim 28, Flores discloses:

wherein the process designer presents a plurality of building blocks to a user, (Fig. 2a).

As per claim 29, Flores discloses:

further comprising a system administrator in communication with the process server, (col. 24, line 64, administrator).

As per claim 30, Flores discloses:

wherein the assigned tasks are performed by a computer, (col. 82, lines 13-16, computer).

As per claim 31, Flores discloses:

wherein the process designer makes developed components and resources available for use in other process models, (col. 71, lines 59-65, provide an additional user interface to design views).

As per claim 32, Flores discloses:

further comprising means for defining a common user interface among the components and resources, (col. 5, lines 39-40, provide a programming interface).

As per claim 33, Flores discloses:

further comprising means for mapping data between components, between resources and between components and resources, (Abstract, lines 7-9, graph tools to map out the business process).

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 703-305-1340. The examiner can normally be reached on Monday-Tuesday 8:30am-5pm, and Wednesday, 8:30 am-12:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238

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[After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



A. R. B.  
March 16, 2005



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600